



Biomedical Sensors for Functional Mapping: Techniques, Methods, Experimental and Medical Applications

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Message from the Guest Editors

Biomedical sensors are key components in various medical instruments and equipment and are valuable tools that provide functional information to better understand the underlying mechanism of relevant biological processes and interventions. The recent development of high-density systems, characterized by a high number of sensors arranged in specific configurations (matrices, arrays, wearable, etc.) has boosted the use of biomedical sensors for functional evaluation, including electrophysiological activity, metabolic response of organs and tissues, motor control analysis, adding meaningful spatial information.

The aim of this Special Issue is to collect papers describing cutting-edge techniques, methods and applications of biomedical sensors, as well as specific algorithms for data processing.

Keywords

- High-density electroencephalography (EEG);
- Multi-channel electromiography (EMG);
- Kinematics and motion analysis;
- Functional near infrared spectroscopy (fNIRS);
- Electrocardiography (ECG);
- Muscle synergies;
- Wearable sensors;
- Image and signal processing;
- Functional and effective connectivity;
- Applied machine learning.



sensors



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Message from the Editor-in-Chief

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